

## REMARKS

Claims 1-18 have been previously canceled and claim 29 is currently canceled. Claims 19, 21-22, 25, 30 and 34 are amended and no new claims have been added by way of this response. Thus, claims 19-28 and 30-38 are currently pending and presented for examination. Applicants respectfully request reconsideration and allowance of the pending claims in view of the foregoing amendments and the following remarks.

### Response to Rejections Under Section 102:

Claims 19, 20, 22 and 34 stand rejected under 35 U.S.C § 102(a) as being anticipated by Won et al. (WO 2004/018724 - published 03/04/2004).

Applicants respectfully submit that Won et al. is not prior art. Won et al. was published on 03/04/2004 as correctly stated by the Examiner, which is after Applicants perfected priority date of December 11, 2003 based on EP 03028577.9. Therefore, Applicants request the Examiner withdraw the section 102(a) rejections.

Claims 19, 20, 22-27 and 34-36 stand rejected under 35 U.S.C § 102(b) as being anticipated by Buckland et al. (USPN 2,920,007).

Applicants submit that Buckland et al. teaches a turbine blade formed of a ferretic base material having either 0.4% or 1.0% silicone by weight, where a crack and impact resistant outer zone is formed from the base material by work hardening the outer surface of the base material and then re-crystallizing the work hardened base material via a heat treatment. In other words, the outer zone of Buckland et al. is merely a different crystal structure of the base material, and not a distinct layer applied onto the substrate material.

In contrast to Buckland et al., Applicants' invention as recited in claims 19 and 22 require the metallic protective layer have **silicone in the amount of 1.5% by weight** and claims 22 and 34 require the metallic protective layer be **applied and bonded to the substrate by adhesion**.

MPEP 2131 requires "TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM."

In view of the above, claim 1 is not anticipated by Buckland et al.. Furthermore, claims 20, 23-27 and 35-36 are also patentable at least based on their dependence from claims 19, 22 and 34 as well as based on their own merits. Therefore, Applicants respectfully request that the Examiner withdraw the Section 102 rejections.

Response to Rejections Under Section 103:

Claim 37 stands rejected under 35 U.S.C § 103(a) as being obvious over Buckland et al.. Claims 30-33 stand rejected under 35 U.S.C § 103(a) as being obvious over Buckland et al. in view of Czech (USPN 5,939,204). Claims 19-29 and 31-38 stand rejected under 35 U.S.C § 103(a), as being obvious over Minato et al. (USPN 3,902,823) in view of Buckland. Claim 30 stands rejected under 35 U.S.C § 103(a) as being obvious over Minato et al. in view of Buckland et al. and further in view of Czech.

Minato et al. in view of Buckland et al.:

As discussed above regarding the section 102 rejections, Buckland et al. does not teach or suggest a metallic protective layer having **silicone in the amount of 1.5% by weight** as recited in claims 19 and 22 or a metallic protective layer **applied and bonded to the substrate by adhesion** as recited in claims 22 and 34.

Furthermore, Applicants submit that Minato et al. teaches a fluid compressor wheel, not a turbine blade as contended by the Examiner, made from a base material having a **maximum of 1.0 % silicone** by weight. Moreover Minato et al. **teaches away** from Applicants invention by stating that toughness of the base alloy decreases with increasing silicone content "... therefore, the amount of silicone should not exceed 1 %." (col 4, lines 19-20).

Applicants submit that the combination of Minato et al. in view of Buckland et al. would yield the turbine blade of Buckland et al. made of the material of Minato et al. having at most 1 % silicone, where a crack resistant outer zone is an integral part of the base material. Therefore the combination of Minato et al. in view of Buckland et al. does not teach or suggest Applicants invention as recited in claims 19, 22 or 34 as discussed above.

In light of the above, the Examiner has failed to establish a prima facie case of obviousness and claims 19, 22 and 34 are patentable. Furthermore, claims 18-23, 23-33 and 35-38 are patentable at least based on their dependence from claims 19, 22 and 34, as well as on their own merits.

In view of the above, Applicants respectfully request the Examiner withdraw the section 103 rejections.

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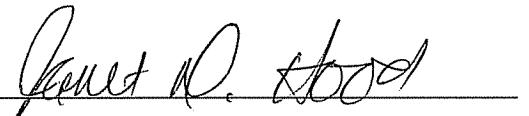
Conclusion

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office Action are inapplicable to the present claims. Accordingly, Applicants respectfully request that the Examiner reconsider the rejections and timely pass the application to allowance. All correspondence should continue to be directed to our below-listed address. Please grant any extensions of time required to enter this paper. The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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